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STATEMENT OF

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BEFORE THE

SUBCOMMITTEE ON LEGISLATION AND NATIONAL SECURITY

GOVERNMENT OPERATIONS COMMITTEE

HOUSE OF REPRESENTATIVES

ON

MILITARY SERVICES' PEACETIME

CONSUMPTION OF MISSILES FOR

TRAINING AND EVALUATION



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Mr. Chairman and Members of the Subcommittee, I am pleased to have the opportunity to appear before this subcommittee to discuss the results of GAO's recently completed review of missile firing for training and evaluation. I will limit my comments to a short summary of our principal findings, since more specific information is classified.

The services have generally held that the firing of missiles in peacetime is necessary to train pilots and gunners by building their self-confidence and morale and to evaluate weapons systems. Their position on training seems to be eroding somewhat. Nonetheless, in fiscal year 1984, the services plan to fire about 7,900 missiles for training and evaluation purposes. These missiles have a replacement value of \$437 million. Based on our work, we believe DOD needs to develop better criteria as to how many missiles the services need to fire to achieve these goals.

Minimizing the numbers of missiles used for these purposes is important because the services do not have enough missiles to meet their wartime inventory requirements. This shortfall will persist for some time even though a significant number of missile deliveries are scheduled in fiscal years 1984 and 1985 and thereafter.

Most missiles are fired annually for training, except for Air Force air-to-air missiles which are fired to evaluate the weapon system--that is to test missiles, aircraft, and crews as integrated units. A secondary benefit from the weapon system evaluation missile firings is training.

Variations in criteria

The Office of the Secretary of Defense (OSD) has not issued policy guidance for the peacetime consumption of missiles. Therefore, the services have each developed their own criteria. As a result, there is variation within and between the services for firing missiles.

An example of this variation is seen in the Marine Corps and Army guidance concerning the TOW missile. The Marine Corps guidance requires each of the two Cobra helicopter crew members and each ground TOW gunner to fire a missile annually to ensure proficiency.

In contrast, the Army guidance requires only its Cobra pilots to fire TOW missiles annually, although it has been providing additional missiles for firing by some of its ground TOW gunners. During fiscal year 1984, the Army allocated about 3,700 TOW missiles for training more than 16,000 pilots and gunners.

Another example of this variation is seen between the Navy/Marine Corps and Air Force for firing air-to-air missiles. The Navy and Marine Corps pilot-training manuals require pilots to fire air-to-air missiles as part of their training to be "combat ready."

On the other hand, the Air Force does not have any requirements in its training manual for pilots to fire air-to-air missiles to be rated "combat ready." However, as stated earlier they do fire air-to-air missiles in the Weapons System Evaluation Program. According to Air Force officials, the critical skill in employing air-to-air missiles is

maneuvering the aircraft into the proper missile launch parameters. This skill can be developed and practiced by using instrumented training ranges, simulators, and other non-firing training methods.

Need to fire missiles

Our analysis of service missile firing results showed that firing missiles may not be necessary to achieve proficiency. The analysis indicates that most target misses are the result of missile or other system malfunctions rather than pilot or gunner error. Our analysis also shows that Army and Marine Corps pilots and gunners firing TOW missiles for the first time scored just about as well as those who had fired more than one TOW; that is, multiple missile firings did not increase gunner accuracy. In this connection, the Army Director of Training has questioned the need for repeated TOW firings. He told us that, in his opinion, based on TOW missile training devices and firing results, each pilot and gunner may need to fire only one TOW missile during his career.

Our discussions with other service officials also raised doubt concerning the need for pilots and gunners to fire missiles. Training officials and unit commanders in the Army, Air Force, and Navy told us that combat-qualified pilots and gunners can be trained without firing missiles because other training devices—such as simulators, tracking devices, and instrumented training ranges can be used.

Reduction in missile firing

Notwithstanding the Navy and Marine Corps annual missile firing requirement they reduced fiscal 1984 firings for training by about 50 percent in order to increase missile inventories. In addition, the Navy is studying the use of simulators and other training devices to see if it can further reduce missile firings. The 1983 DOD IG report which prompted the Navy actions questioned the need to fire missiles for training because (1) missile skills can be developed up to the point of firing the missiles through the use of simulators and other training devices, and (2) missile inventories were less than their wartime requirements.

The Army and Marine Corps plan to use simulators to train their gunners rather than firing the new Stinger missile because each missile costs \$76,000. Moreover, an Army study has shown that simulators and tracking devices are highly effective in developing the target-tracking skills of Cobra TOW missile gunners.

In our view, developing proficiency through live firings is constrained because current missile firings take place under artificial conditions, imposed by safety and range restrictions. Specifically, some missile targets do not realistically simulate the threat; some missile shots are at non-maneuvering targets; and pilots usually know the direction, altitude, and speed of the target in advance.

For example, Army ground TOW missiles are fired at stationary targets under ideal conditions, bearing little relation to actual combat conditions. The Marine Corps also fires at stationary targets, though it does use more realistic combat techniques. Air Force pilots in Europe and Korea make Maverick missile training shots by using techniques that are not combat realistic and by shooting at plainly marked stationary targets.

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In summary, we believe that, there is a need for criteria to justify the number of missiles fired for training and evaluation. OSD should work with the services to develop firing criteria. This criteria should be developed for each type of missile through studies and analyses and should address the extent to which pilots' and gunners' use of available training devices could replace the actual firing.

That concludes my statement, Mr. Chairman. We will be happy to answer any questions the subcommittee may have.